

**We claim:**

1. The use of phyllosilicates for improving the chemicals resistance, reducing the swelling, and improving the stress-cracking resistance of styrene copolymers.

5

2. The use as claimed in claim 1, wherein the chemicals resistance is improved with respect to chemicals selected from alcohols, C<sub>3</sub>-C<sub>8</sub> alkanes, gasoline, premium gasoline, diesel, halogenated hydrocarbons, hypochlorite salts, and sodium dichloroisocyanate dihydrate.

10

3. The use as claimed in claim 1 or 2, wherein the phyllosilicates used have been selected from kaolinite types, serpentine types, pyrophyllite, and silicates of mica type, and mica.

15

4. The use as claimed in any of claims 1 to 3, wherein the styrene copolymers have been built up from components A, C, and, where appropriate, B, D, and E, using:

A

20

a: as component A, from 20 to 100% by weight, based on the entirety of components A + B, of a hard component made from one or more copolymers of styrene and/or  $\alpha$ -methylstyrene with acrylonitrile, the proportion of acrylonitrile being from 10 to 50% by weight,

b: from 0 to 80% by weight, based on the entirety of components A + B, of at least one graft copolymer B made from

25

b1: as component B1, from 10 to 90% by weight of at least one elastomeric particulate graft base with a glass transition temperature below 0°C, and

b2: as component B2, from 10 to 90% by weight of at least one graft made from polystyrene or from a copolymer of styrene and/or  $\alpha$ -methylstyrene with acrylonitrile, the proportion of acrylonitrile being from 10 to 50% by weight,

30

where the entirety of the components A + B used is from 10 to 100 parts by weight, based on the total weight of the components used,

35

c: as component C, from 0.05 to 5 parts by weight, based on the total weight of the components used, of a phyllosilicate,

d: as component D, from 0 to 90 parts by weight, based on the total weight of the components used, of at least one polycarbonate, and  
e: as component E, from 0 to 20 parts by weight, based on the total weight of the components used, of other conventional auxiliaries and fillers.

5

5. The use as claimed in claim 4, wherein the proportion of acrylonitrile in components A, and, where appropriate, B2 of the styrene copolymers is less than 28% by weight, based on each appropriate component.

10

6. The use as claimed in claim 4, wherein the proportion of acrylonitrile is from 18 to 27% by weight.

7. A thermoplastic molding composition built up from components A, C, and, where appropriate, B, D and E, as claimed in claim 5 or 6.

15

8. A process for preparing styrene polymers with improved chemicals resistance, built up from components A, C, and, where appropriate, B, D, and E, as claimed in any of claims 4 to 6, which comprises separately preparing A, C, and, where appropriate, B, D, and E, combining component A with component C, and

20

intimately mixing and then extruding the same with components B, D, and E, as appropriate.

AAA, >